

January 12, 1998

Robert W. Hargrove, Chief
Environmental Impacts Branch
U.S. Environmental Protection Agency, Region II
290 Broadway
New York, New York 10007-1866

Dear Mr. Hargrove:

This letter serves as a follow-up to the August 26, 1997 meeting, September 9, 1997 conference call, and subsequent telephone conversations between the U.S. Fish and Wildlife Service (Service) and the U.S. Environmental Protection Agency, Region II (EPA) regarding the Service's Biological Opinion (BO), issued June 26, 1996, pursuant to Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA), on the effects of EPA's proposed action to approve the State of New Jersey's Surface Water Quality Standards, April 1994 Revision (NJSWQS) on the federally listed threatened bald eagle (*Haliaeetus leucocephalus*), endangered peregrine falcon (*Falco peregrinus anatum*), and endangered dwarf wedgemussel (*Alasmidonta heterodon*). This letter amends the terms and conditions of the Service's June 26, 1996 BO on the effects of the EPA's proposed action.

BACKGROUND

The Service's BO concluded that the EPA's proposed approval of the 1994 NJSWQS would not jeopardize the continued existence of the bald eagle, peregrine falcon, or dwarf wedgemussel. However, it was the Service's biological opinion that the proposed action could result in the incidental take of bald eagle, peregrine falcon, or dwarf wedgemussel individuals. Therefore, the BO detailed three reasonable and prudent measures to minimize take of federally listed species from the proposed action and six non-discretionary terms and conditions deemed necessary to implement those measures. Since the Service was aware that the State of New Jersey intended to propose amendments to its NJSWQS in 1996, the BO required the EPA to implement four of the terms and conditions immediately by working with the State of New Jersey to include certain protective measures for federally listed species within the 1996 NJSWQS amendments. Further, the BO detailed two additional terms and conditions where, due to the complexity of the issues, the EPA was given until the next scheduled triennial revision (1999) of the NJSWQS to complete implementation.

By letter dated August 22, 1997, the EPA informed the Service that the State of New Jersey had withdrawn its 1996 proposed amendments to the NJSWQS. As a result of the State's action, the EPA was unable to comply with the terms and conditions of the Service's BO. Nonetheless, the EPA must, in order to comply with Section 7 of the ESA, ensure that the terms and conditions of the Service's BO regarding the 1994 NJSWQS are implemented at the first available opportunity; specifically, during the next triennial review of the NJSWQS.

During an August 26, 1997 meeting and a September 9, 1997 conference call, representatives of the Service and EPA discussed proposed amendments to the terms and conditions of the Service's June 26, 1996 BO. On October 10, 1997, the Service provided the EPA with a draft of the Service's amended terms and conditions. On October 17, 1997, the Service received the EPA's comments on the amended terms and conditions. On December 8, 1997, the Service provided the EPA with a revised draft of the amended terms and conditions. The EPA provided comments via telephone on the revised draft. During subsequent coordination via telephone, the Service and the EPA discussed the EPA's concerns and comments regarding the amended terms and conditions. As a result of these discussions, three amended terms and conditions were developed by the Service to replace the six terms and conditions described in the June 26, 1996 BO.

TERMS AND CONDITIONS

The terms and conditions, which implement the reasonable and prudent measures described in the Service's June 26, 1996 BO on the effects of EPA's proposed action regarding the 1994 NJSWQS, are amended as follows. In order to be exempt from the prohibitions of Section 9 of ESA, the EPA must comply with these amended terms and conditions. These terms and conditions are nondiscretionary.

1. The 1999 or earlier triennial proposed revisions to the NJSWQS must include provisions within the mixing zone policy that prohibit mixing zones in areas with documented occurrence of the dwarf wedgemussel.
2. The 1999 or earlier triennial proposed revisions to the NJSWQS must include provisions within the antidegradation policy that clearly indicate that federally listed species are existing uses. The antidegradation policy must include a statement that existing and designated uses of New Jersey surface waters, including maintenance, migration and, as appropriate, propagation of all federally listed endangered or threatened species, and the water quality level necessary to protect those uses, shall be maintained and protected.
3. By 1999, based on a joint effort among the EPA, the New Jersey Department of Environmental Protection (NJDEP), and the Service, develop numeric wildlife criteria for DDT, PCBs, and mercury that are protective of federally listed threatened and endangered species, including the bald eagle and peregrine falcon, using the Great Lakes Initiative

wildlife methodology and all available New Jersey-specific data. In the event that national wildlife criteria for these substances are developed prior to the development of New Jersey-specific criteria, the national wildlife criteria may be adopted by the NJDEP. If NJDEP fails to adopt the resultant criteria, the EPA must take appropriate action to promulgate numeric wildlife criteria for the State of New Jersey.

Development of New Jersey-specific wildlife criteria for the 1999 proposed revisions to the NJSWQS must include an evaluation of biological impacts to the bald eagle and peregrine falcon.

a. At a minimum, an evaluation of biological impacts must include the following:

- (i) a comprehensive list of all literature, from published and unpublished sources, used by the joint effort workshop to identify the laboratory and field toxicity of the subject contaminants to living organisms, particularly the bald eagle and the peregrine falcon;
- (ii) a summary of all available data used by the joint effort workshop in assessing potential impacts to bald eagles and peregrine falcons from the proposed revisions to the NJSWQS;
- (iii) a determination of the relative bioaccumulation / biomagnification potential (rates of bioaccumulation) for PCBs, DDT, and mercury from water to fish and avian prey species, and from prey species to top predators (i.e., bald eagles or peregrine falcons); and
- (iv) an analysis of direct, indirect, and cumulative impacts of the proposed revisions to the NJSWQS on the bald eagle and peregrine falcon, including impacts on the health of individuals, reproductive behaviors, reproductive rates, feeding behaviors, prey species and prey species abundance, and bioaccumulation and biomagnification of contaminants.

b. In addition to the items required under (a) above, the Service recommends that the EPA's evaluation of biological impacts include, but not be limited to, a review of the following:

- (i) the results of water quality and sediment testing for the subject contaminants in New Jersey drainages where bald eagles and / or peregrine falcons are known to forage;
- (ii) the anticipated number of permitted discharges on major drainages where bald eagles and / or peregrine falcons have been documented;

- (iii) bald eagle and peregrine falcon productivity and eggshell thickness data and any relationship with the subject contaminants (to include data for the United States and / or the appropriate recovery zone for each species and a comparison of these data with data available for the State of New Jersey);
- (iv) information on non-point sources of the subject contaminants, (e.g., atmospheric deposition), sources outside New Jersey, and background in biota and sediments; and,
- (v) the results of an ecological risk assessment that identifies the trophic transfer (bioaccumulation potential) of PCBs, DDT, and mercury, concluding in an approximation of the risk to bald eagles and peregrine falcons foraging in discharge areas in the State of New Jersey. Such an assessment must include all assumptions, uncertainties, and exposure factors used to identify risk.

SERVICE RESPONSE TO EPA COMMENTS ON AMENDED TERMS AND CONDITIONS

Following review of a draft of the Service's amended terms and conditions, the EPA had requested changes to Conditions 1 and 3b above. The Service's response to EPA's comments on the amended terms and conditions, explaining why such requested changes were not made, is provided below.

Condition 1

The EPA had proposed that the Service amend Condition 1 to include a provision within the State's mixing zone policy that mixing zones will not be granted that would likely jeopardize the continued existence of federally listed species. The Service encourages the EPA and the State of New Jersey to include the EPA's proposed provision within the State's mixing zone policy, since such a provision is consistent with ESA requirements and would afford protection for all federally listed species. However, the wording proposed by EPA is too broad to serve as a term and condition. Specifically, the EPA's proposed amendment to Condition 1 could allow a certain level of take of dwarf wedgemussels to occur, so long as the jeopardy threshold had not been reached. The terms and conditions within the BO are intended to outline specific actions that must be undertaken by the action agency (in this case EPA) to ensure that the reasonable and prudent measures will minimize incidental take of the federally listed species considered. In New Jersey, only one site that may potentially support an occurrence of the dwarf wedgemussel is known. Due to the sensitivity of mussels to degraded water quality (as is well-documented within the scientific literature), it is the Service's opinion that mixing zones (allocated impact zones where water quality criteria can be exceeded as long as acutely toxic conditions are prevented) must not be permitted in areas with occurrence of the dwarf wedgemussel in order to minimize take of the species.

Condition 3b

The EPA had recommended including Condition 3b of the amended terms and conditions as a conservation measure, rather than as a term and condition. Condition 3b does not constitute a conservation action; it is intended to provide guidance regarding the types of information that would assist the EPA in fully evaluating the potential impacts to federally listed species from revisions in State Surface Water Quality Standards. Such information would provide for a defensible and scientifically-based decision and would also assist the Service in expediting Section 7 consultation on EPA's proposed approval / disapproval of revisions to the State Surface Water Quality Standards during the next triennial review.

The Service looks forward to working in partnership with the EPA and the State of New Jersey to ensure that surface water quality standards in New Jersey are protective of federally listed threatened and endangered species. If you have any questions regarding this information, please contact John Staples or Annette Scherer of my staff.

Sincerely,

Clifford G. Day
Supervisor

cc: NJFO (5)
GARD, R5, North/ES
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